USDI, Bureau of Land Management Burns District 28910 Hwy 20 West Hines, Oregon 97738

FINDING OF NO SIGNIFICANT IMPACT and Decision Record for

Mortar Riddle Site Excavations Environmental Assessment OR-04-027-031

INTRODUCTION

This Environmental Assessment (EA) was completed to analyze the impacts of implementing the proposed action to scientifically excavate a small portion of the Mortar Riddle Site in the Riddle Brothers Ranch National Historic District. The Mortar Riddle archaeological site (35HA2627) is located at T. 33 S., R. 32¾ E., Section 31, NW¼ of NE¼. The Historic District access road bisects the site.

The Mortar Riddle Site was first recorded in 1992 by a contractor inventorying the prehistoric sites in Riddle Brothers Ranch National Historic District. Since that time the site has been monitored frequently. It has a very rich array of surface artifacts and is in close proximity to public access. In 2002 the site was re-recorded and surface artifacts mapped and collected. The site was slated for limited subsurface testing in summer 2003. The 2003 field work yielded an enormous amount of data including numerous prehistoric tools, fish and mammal bones, charred seeds and wood, and evidence of fire hearths. The site appears to be a summer long-term camp where prehistoric people not only harvested the rich biotic diversity of the immediate area surrounding the camp but also accessed the summertime big game habitat of Steens Mountain. The 2004 field work is proposed in order to answer a number of archaeological questions such as:

- 1. Were there shelter or house structures in the camp and is there evidence in the site deposits?
- 2. What animals (including fish) were processed at the site?
- 3. What plants were processed at the site?
- 4. How old are the oldest deposits at the site? Radiocarbon dates of charcoal taken in the test excavations yielded a date of occupation from 500 to 1450 AD.
- 5. Is there any evidence at the site suggesting connections to other prehistoric people in the northern Great Basin?

The purpose of the excavation is to fully describe the contents and condition of the Mortar Riddle Site with an attempt to answer questions posed above. The data derived from the field reports and Master's thesis will be used in public education and interpretive materials.

SUMMARY OF PROPOSED ACTION

- 1. The proposed action involves hand digging with shovels and trowels up to five excavation units measuring 6 feet long, 3 feet wide, and up to 5 feet deep. Unit perimeters would be flagged to alert passersby of the hazard. Excavation activities would adhere to safety requirements set forth in 29 CFR 1926.652(a)(1)(ii) which states "excavations that are less than 5 feet (1.52m) in depth and examination of the ground by a competent person provides no indication of a potential cave-in."
- 2. There is a possibility that prehistoric human remains could be found during the excavation. If such remains are encountered, the excavation involved would cease, the unit containing the human remains would be closed, and the Burns Paiute Tribe would be contacted.
- 3. The proposed project would occur between July 6 and August 1, 2004.
- 4. The sediments from the excavation would be screened through 1/8-inch screen using water sprayed through common garden nozzles. Water would be furnished from the Bureau of Land Management (BLM) administrative site well via 2-inch fire hose run cross-country to the site. It is expected that four nozzles would be operated approximately 4 hours a day, every day during the excavation. Each hose would discharge approximately 250 gallons of water a day as well as sediment less than 1/8-inch in size. Total water consumption a day would be 1,000 gallons and for the entire excavation 20,000 gallons. The water screening apparatus would be set up over a relatively gentle, eroded surface at the south boundary of the site. The screening station would be approximately 100 yards uphill of the access road. Sediment would drop out below the screening stations and used to back fill the excavation units when completed. Water would percolate into the ground and is not expected to reach the access road.
- 5. A crew averaging 10 people would be working at the site every day. The development of trails would be minimized by flagging walking routes and asking the crew to use these routes in the back and forth traverse of the site. The ground around excavation units/screening and note-taking areas would be protected by covering the mineral soil and low vegetation with heavy canvas. Trails and other trampled areas would be rehabilitated by broadcast seeding with weed-free native species such as Idaho fescue and Great Basin wildrye and raking the seed into the soil.

All but two of the crew would camp at South Steens Campground. The project proponent and her field assistant would be staying at the nearby administrative site. The crew would not bring vehicles to the site. They would be transported via one vehicle from the campground to the site every day.

- 6. Excavation units would be refilled at the end of the excavation with sediment stock piled at the screening stations and a weed-free silt/sand mixture purchased from a local sand and gravel company. Sediment would be wheeled to excavation units with wheelbarrows and dumped. Once units are overfilled and tamped, native seed such as Great Basin wildrye and Idaho fescue would be broadcast and raked in.
- 7. Parking along the access road within or adjacent to the site would be discouraged. A previously disturbed pull-out 40 yards to the north of the site would accommodate vehicles turning around and temporary parking. Other parking would be in the BLM administrative site lot 150 yards south of the site.
- 8. Human waste disposal would be accomplished by setting up a portable outhouse at the site during the excavation.
- 9. A botanical clearance would be completed prior to implementation of this project.

FINDING OF NO SIGNIFICANT IMPACT

This proposal is in conformance with the various Federal laws, regulations, and Executive Orders and to the Riddle Brothers Ranch Cultural Resource Management Plan (CRMP)/EA of 1995. In addition it conforms to the goals and objectives outlined in the Proposed Andrews Management Unit/Steens Mountain Cooperative Management and Protection Area RMP and Environmental Impact Statement (EIS). Based on the analysis of potential environmental impacts contained in the EA and all other information, I have determined that the proposed action and alternatives analyzed do not constitute a major Federal action that would significantly impact the quality of the human environment. Therefore, an EIS is not necessary and will not be prepared.

Rationale:

This determination is based on the following:

The following critical elements of the human environment are not known to be present in the project area or affected by enacting either alternative: Areas of Critical Environmental Concern, adverse energy impact, air quality, environmental justice, farmlands (prime or unique), floodplains, hazardous materials, migratory birds, American Indian religious concerns, noxious weeds, paleontology, Special Status species (fauna), water quality, wetlands and riparian zones, wilderness and Wilderness Study Areas. All potentially impacted resources were analyzed in the EA specific to the proposed action. The following resources were analyzed in the EA: Cultural heritage, Special Status species (plants), Wild and Scenic Rivers, recreation, soils, vegetation, and visual resources. Impacts to these resources are considered nonsignificant (based on the definition of significance in 40 CFR 1508.27 for the following reasons:

Cultural Heritage

Mortar Riddle Archaeological Site would not be substantially affected under the proposed action. The proposed excavation would disturb less than 1 percent of the total site volume. The negative effects of the disturbance include total destruction of the stratigraphic context in up to five proposed units. However, the positive effects of scientific excavation would include collection of data having bearing a number of archaeological questions such as time span of site use, presence of living floors or structures, types of plants and animals gathered and processed by the prehistoric occupants, and connections with other groups of prehistoric people outside the region. Careful notation, measurement, and analysis of artifacts and biological and environmental samples would occur under the proposed action. Additionally, full-scale reporting in the form of a Master's thesis and presented and published articles would result from the scientific study of the site. These documents would help form the basis for heritage education and interpretation on Steens Mountain and elsewhere in the region.

The Mortar Riddle Site is not known to be used by American Indian Tribes for traditional uses or religious practices. Scientific excavation, though destructive in nature, would produce information and analysis having direct bearing on how their ancestors lived in the northern Great Basin. The Burns Paiute Tribe has been consulted about the proposed action and expressed no concerns. The BLM will involve Tribal members in the field work and will present findings to the Tribal Elders and Cultural Resources Department.

Special Status Species - Plants

The site is located on a rocky stream terrace at least 50 feet above the Little Blitzen floodplain. No effect on Special Status plant species would occur under the proposed action alternative because they probably do not exist in the site area. However, a Special Status plant inventory will occur in the proposed project area in June 2004. If Special Status plants are found in the inventory, the excavation units and activity areas would be placed to avoid the plants.

Wild and Scenic Rivers

Under the proposed action, activity in the Little Blitzen Wild and Scenic River corridor, especially near the administrative site and in the site area, would increase for 1-month. The activity would be noticeable because visitors to the Riddle Brothers Ranch headquarters would pass through the site on the access road. Archaeological equipment such as hand tools, water screens, drying racks, hoses, shade cloth, portable picnic table and chairs, would also be visible from the access road for a month's time. The excavation units and associated ground disturbance would not be visible from the access road. A certain amount of trampling from the archaeological crew would be evident in the site area. This disturbance would be visible but not particularly noticeable. Excavation units would be backfilled, contoured, and seeded with native species occurring on the site. Within one growing season, evidence of the excavation and associated activities would be negligible.

Recreation

The proposed project would positively affect recreation in the Riddle Brothers Ranch National Historic District because it would enhance the visitors' recreation experiences. Most people are interested in prehistoric archaeology. Visitors to the Historic District would have the opportunity to see an archaeological excavation in detail and receive a guided tour of the operation.

Soils

Under the proposed action, five excavation units measuring 6 feet long, 3 feet wide, and up to 5 feet deep would be dug. This activity would negatively affect soil structure and stratigraphy within the units. The units would be backfilled to the original surface upon completion of the excavations.

Vegetation

Vegetation within the excavation units would be destroyed. Unit location would be selected to avoid as much sagebrush and Great Basin wildrye as possible. These two plants have extensive root systems that can negatively affect excavation activities. Moderate vegetation trampling outside the excavation units within the site would be expected under the proposed action. The ground around excavation units/screening and note-taking areas would be protected by covering the mineral soil and low vegetation with heavy canvas. Trails and other trampled areas would be rehabilitated by broadcast seeding with weed-free native species such as Idaho fescue and Great Basin wildrye and raking the seed into the soil. The backfilled excavation units would be seeded with a seed-free mixture of Great Basin wildrye and bluebunch wheatgrass. Within one growing season, evidence of the excavation and associated activities would be negligible.

Visual Resources

There would be short-term effects to visual resources. Rectangular forms would be added to the landscape through the excavation of 6-foot by 3-foot units. Color contrasts would be created through fresh soil exposures. The excavation equipment would also add a variety of forms, lines, and colors to the landscape. In the short term, the activity and equipment would attract attention, but in the long term, the VRM Class I objective would be met.

DECISION RECORD

<u>DECISION</u>: Having considered the range of alternatives and associated impacts and based on the analysis in the Mortar Riddle Site Excavation EA, it is my decision to implement the proposed action which proposes to improve not only the knowledge of the how, what, when, and why of this prehistoric site but how the site fits into the prehistoric use of Steens Mountain and the northern Great Basin. In addition, the proposed action will yield technical and interpretive information useful in public education within the archaeological community and the public.

Rationale for Decision: I have selected the proposed action for the following reasons:

The proposed action would increase our knowledge of the Mortar Riddle Site, the people who lived there and what resources they used on Steens Mountain and the surrounding area. Additionally, it will provide information regarding the breadth of interaction between prehistoric people in the northern Great Basin. This information will be used in future public education activities.

Based on past experience, there is a high likelihood for success.

It includes coordination with Burns Paiute Tribe and avocational archaeology groups in Portland, Bend, and Burns/Hines.

It conforms to the Riddle Brothers Ranch CRMP/EA of 1995 and to the goals and objectives outlined in the Proposed Andrews Management Steens Mountain Cooperative Management and Protection Area RMP and EIS.

It is in compliance with the various Federal laws, regulations, and Executive Orders dealing with heritage resources. In addition, the proposed action is in conformance with State, local, and Tribal land use plans, laws, and regulations.

It is in compliance with Federal laws that mandate management of public land resources (Federal Land Policy and Management Act of 1976).

I have also considered alternatives to the proposed action including:

Alternative 1- No Action: The no action alternative or existing management includes site monitoring, periodic surface collection and mapping, and limited test excavation. Limited test excavation in this case refers to excavation units generally no larger than 18 inches by 18 inches in surface area and up to 3 feet deep. Limited test excavation units are backfilled after completion. I did not select this alternative because it was not comprehensive in its scope and would not supply key information needed to fully describe and interpret the Mortar Riddle Site.

This decision may be appealed to the Interior Board of Appeals, Office of the Secretary, in accordance with regulations contained in 43 CFR, Part 4 and Form 1842-1. If an appeal is filed, your notice of appeal must be filed in the Burns District Office, 28910 Highway 20 West, Hines, Oregon 97738 by June 1, 2004. The appellant has the burden of showing that the decision appealed is in error.

If you wish to file a petition, pursuant to regulations 43 CFR 4.21, for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for stay must accompany your notice of appeal. A petition for stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the Appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

- 1. The relative harm to the parties if the stay is granted or denied.
- 2. The likelihood of the appellant's success on the merits.
- 3. The likelihood of immediate and irreparable harm if the stay is not granted.
- 4. Whether or not the public interest favors granting the stay.

Signature on File	6/1/2004
Karla Bird	Date
Andrews Resource Area Field Manager	